

The logo features the word "ENERGY" in a bold, black, sans-serif font. The letters are thick and blocky, with a slight shadow effect. A large, light grey arc curves from the bottom left towards the top right, passing behind the text. A registered trademark symbol (®) is located at the end of the word.

ENERGY®

S P E A K E R S Y S T E M S

i n d o o r / o u t d o o r
l o u d s p e a k e r

Tempest®

Now, you can really believe the same speaker can work just as well Outdoors and Indoors. Congratulations! And, thank you for choosing the "Tempest" Indoor/Outdoor Loudspeaker from **Energy Speaker Systems**. With proper installation and operation, you'll enjoy years of trouble-free high fidelity listening.

INTRODUCTION

Your decision to purchase the "Tempest" all weather speaker marries unparalleled listening satisfaction with the freedom to listen to music anywhere! Whether inside or outside your home , cottage, chalet or place of business, the exclusive technology used in the "Tempest" makes it uniquely adaptable for virtually all lifestyles and environments.

The **Energy** engineering team has been designing world renowned, leading edge loudspeakers for over 20-years. This extensive knowledge base has resulted in the incorporation of many innovative design features that, when used in combination with quality electronics, assure you of audiophile quality sound performance wherever you choose to locate your "Tempest" speakers.

"Tempest" will not only be an attractive addition to your interior or exterior decor; but features like its unique bass boost control, high quality tweeters and woofers, and precision crossover network will provide you with exceptional sonic benefits as well.

Because **Energy Speaker Systems** strives to continuously improve its products, we reserve the right to change product specifications without notice.

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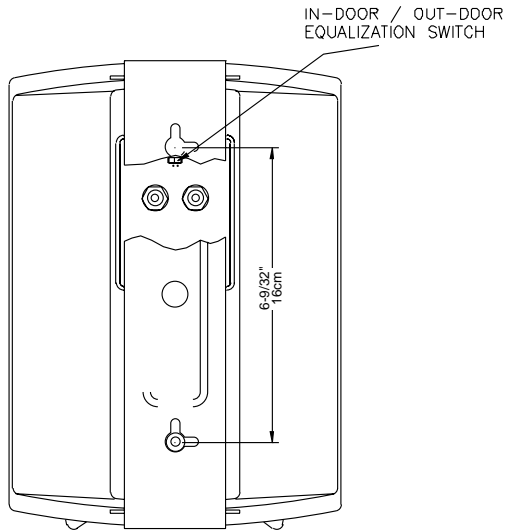
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IMPORTANT: PLEASE RETAIN THE CARTON AND PACKING MATERIAL FOR THIS ENERGY PRODUCT TO PROTECT IT IN THE EVENT IT EVER HAS TO BE SHIPPED TO A SERVICE CENTER FOR REPAIR. PRODUCT RECEIVED DAMAGED BY A SERVICE CENTER THAT HAS BEEN SHIPPED BY THE END USER IN OTHER THAN THE ORIGINAL PACKAGING, WILL BE REPAIRED, REFURBISHED AND PROPERLY PACKAGED FOR RETURN SHIPMENT AT THE END USER'S EXPENSE.

FEATURES & BENEFITS

Diagram 1: INDOOR OUTDOOR SWITCH



Indoor-Outdoor Bass Boost Switch:

Audio experts have known for years that sound, and bass frequencies in particular, lose impact in outdoor environments. To compensate, many people will turn up the volume, overdriving their system, and damaging the speakers' components.

In response, "Tempest" engineers designed a unique switch that increases bass when in the "outdoor" position. At the same time, it protects "Tempest" models from overdrive damage in exterior applications. The result is dramatically improved sound reproduction, more reliable operation, and longer life.

In the "indoor" position, performance is automatically adjusted to produce optimum results for use inside rooms.

Dome Tweeter:

The 1/2" (13mm) Dome tweeter used in the "Tempest" combines the dual benefits of weather resistance and faithful reproduction of extended high frequency sounds. The result is a rugged high performance tweeter that provides exceptional high frequency resolution, faithful reproduction of ambiance and musical detail, combined with increased high frequency dynamic range.

Long Throw Polypropylene Woofer:

"Tempest" employs a weather resistant injection-molded 5-1/4" (13.3cm) polypropylene woofer; made from a unique composite material, developed by **Energy Speaker Systems**. The result is smoother response, controlled upper range roll off and tighter dispersion in the critical midrange.

Eight Ohm Impedance:

"Tempest" has been designed to be compatible with the 8-ohm speaker impedance requirements of today's amplifiers and receivers.

Premium Gold-Plated Five-Way Binding Posts:

"Tempest" employs 5-way binding posts, making connection possible with a wide range of high quality speaker wire and terminals. Gold plating assures a secure electrical connection for distortion-free performance.

Protective Terminal Cover:

This exclusive, snap-on terminal cover protects the critical amplifier-to-speaker connections from weather-induced corrosion.

All Weather Design:

The materials used in the manufacture of "Tempest" speakers have been carefully selected to stand up to extremes of temperature (from -50°F to 200°F), rain, snow, heat, salt water, and the sun's UV rays. "Tempest" is ruggedly constructed with a combination of: (1) a low-resonance mineral-filled polypropylene cabinet, (2) brass, stainless steel and aluminum hardware, and (3) gold-plated binding posts.

Easy Installation:

Installing "Tempest" is a breeze! Connections are user-friendly and the tapered cabinet shape allows it to be easily, and attractively, mounted out of the way under your home's eaves, or in corners.

Energy engineers have made it easy to mount "Tempest" securely in either a vertical or horizontal position using its rugged aluminum mounting bracket. It is equipped with ergonomically designed adjustment knobs that allow you to firmly secure the speaker in place. This bracket permits the speaker to be focused toward the desired listening area, or allow easy moving of "Tempest" to a new location.

RECOMMENDED WIRING & AMPLIFIER POWER

Selection of Proper Wire:

We recommend the use of high quality speaker cable. The speaker cable you select will ideally be fitted with high quality connectors such as 5/16" (8mm) spade lugs. In most installations, ordinary lamp cord (16-18 gauge) has enough resistance to degrade the signal between amplifier and speakers, particularly in lengths over 10-feet (3m).

Amplifier Requirements:

Energy loudspeakers have been designed to be driven to high listening levels with moderate power; while at the same time being capable of handling the power output of large amplifiers.

PAINTING THE "TEMPEST"

"Tempest" can be painted to match its surroundings. To preserve the acoustic qualities of the grille, please paint the grille according to the grille painting instructions. Pick a paint that is appropriate for the mounting location; there are interior and exterior varieties. If you are not sure what paint to use, consult a paint store or a professional painter.

Tools Required:

- A spray can of sandable primer paint.
 - *The correct finish paint for the surroundings (oil or water based paint is fine).
- A paint brush or applicator if the paint is not in a spray can.
- A paper clip or a corkscrew (for removing the grille).
- Masking tape.
- 2 baffle paint masks (supplied).
- A damp cloth and a dry cloth.

Preparation:

- (1) Separate the parts of the speaker. Remove the brackets and the knobs. Hook the grille with a bent paper clip, or the tip of a corkscrew, and gently pull it away from the cabinet.
- (2) Wipe off the cabinet, the bracket, bracket knobs, and grille with a damp cloth. Do not touch or rub the speakers on the front baffle. Ensure everything is dry before masking.
- (3) Cover the binding posts and the brass threaded inserts on the back panel, and the threaded inserts on the top and bottom with masking tape.
- (4) Protect the front of the speakers by inserting the supplied paint masks in place of the grilles.

Painting the Cabinet, Bracket Knobs and Bracket:

- (1) Apply two thin coats of a primer to the cabinet and knobs. We recommend a sandable spray primer. The bracket doesn't require a coat of primer.
- (2) Allow the primer to dry completely.
- (3) Apply the finish color, according to the directions supplied by the paint manufacturer.
- (4) Allow the paint to dry completely.
- (5) Carefully remove the baffle masking material.
- (6) Do not reattach the speaker to the bracket until the bracket is mounted. Try to keep all handling of the freshly painted parts to a minimum.

Painting the Grille:

The grille is important to the sound of the "Tempest". Do not fill the holes of the grille with paint. It is constructed of painted aluminum; this paint is an ideal primer.

If you are using a spray paint, use two thin coats without any primer. If you are using a compressor and a spray gun, use the finest setting. Practice on paper if you are not experienced in painting with spray paint.

If you are using an applicator or brush and a can of paint, thin the paint first. Thick paint will tend to clog the grille holes.

Replacing the Grille:

Set the grille carefully into its recess. Starting with one corner, go around the speaker, pushing the grille in a little bit each time. Be gentle, the aluminum grille can be easily bent out of shape. You will feel a positive "snap" when it is fully in place.

PLACING "TEMPEST" FOR THE BEST SOUND QUALITY

The broad "Tempest" dispersion pattern delivers high quality sound over a large listening area. However, if a single pair is used to provide coverage of a very large room or patio, you may have small areas of louder sound near the speakers. The best way to avoid this in a large space is to use additional pairs of "Tempest" speakers. In this case, we suggest alternating a left channel and a right channel of a stereo pair, so that you don't position a "left next to a left".

The interaction of speakers and their surroundings plays an important role in creating a proper stereo image. Experiment to find the very best position for your speakers. Here are some guidelines to make the process quick and easy:

- (1)** Try to ensure you are not blocking or reflecting the sound off furniture or other objects. A direct line of sight with the front of the speaker is best.
- (2)** Determine the listening distance; that is the distance between the most-often used listening position and the wall on which you plan to mount the speakers.
- (3)** For best results, mount the speakers so that they are at 1/2 to 2/3 of the listening distance apart. This will help to establish the stereo image for which Energy speakers are renowned. The total separation of your "Tempest" speakers should be less than the entire listening distance to avoid the effect of a hole-in-the-sound field. For example; if your listening position is twelve feet (3.7m) back from the wall, the speakers should be between six and nine feet (1.8- 2.7m) apart.

Good Placement Can Mean Better Bass

Placement can partially control bass output. If you mount the "Tempest" directly to a wall or other flat surface, the surface close to the speaker will reinforce the bass frequencies. Mounting the "Tempest" in a corner or under an eave can increase the bass output because the sound reflects off two "boundaries".

MOUNTING VARIATIONS

"Tempest" can be mounted either horizontally or vertically. The supplied bracket and knobs will keep the speaker in any position when properly installed and tightened. Choose from these methods to attach the "Tempest" to a wall, ceiling, or other mounting surface:

- (1)** If the speaker is never going to be exposed to sudden accidental impacts, wind, waves or earthquakes, hang it on a nail using the nail hole(s) of the bracket. We recommend, however;
- (2)** The safest and most secure way to mount "Tempest" is by screwing the bracket supplied with the speaker to the selected mounting surface using hardware specifically suitable for the surface you are mounting to (not supplied).
- (3)** To position the speaker at unusual angles or distances from the mounting surface, there are also threaded brass inserts on the back of the "Tempest". Use them to

Tools Required:

- A wire stripper
- A carpenter's level
- Three screws or bolts suitable for the mounting surface
- A pencil or pen
- * Any other hardware required for safe mounting to the surface selected
- The proper screwdriver for your mounting hardware
- An electric drill
- A drill bit of the right size and type

Safety First!

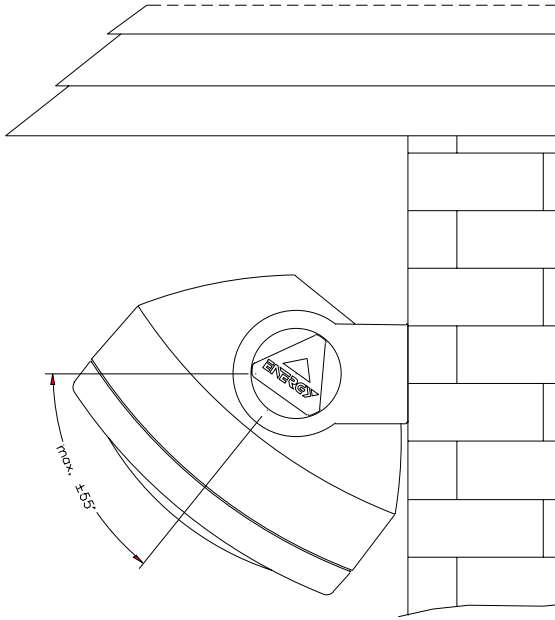
Only use hardware designed specifically for the surface onto which you are mounting the speaker. Each "Tempest", with the bracket, weighs 6 1/2 pounds (2.9kg). We recommend that you consult a professional installer or a building contractor, if you are not sure of a safe way to mount the speakers.

By placing the speaker to receive less exposure to the elements, you will prolong its life. This may mean placing "Tempest" in a location giving the best overall compromise between sound quality, convenience, and exposure. **Do not compromise safety.**

Mounting the Bracket:

- (1) Remove the bracket knobs and the bracket from the speaker.
- (2) Hold the bracket up to the mounting surface. "Tempest" can be mounted either horizontally or vertically. Hold the bracket so that the speaker wire fits through the large, circular wire hole in the bracket. Align the bracket to be square with the surroundings (use a level for accuracy).
- (3) Mark the locations of the three shaped screw holes. Use all of the holes.
- (4) Drill pilot holes into the mounting surface.
- (5) Gently pull the speaker wire through the wire hole in the center of the mounting bracket. Align the bracket so that the holes all line up.
- (6) Use your hardware to attach the bracket to the mounting surface.

Diagram 3: EAVE MOUNTING

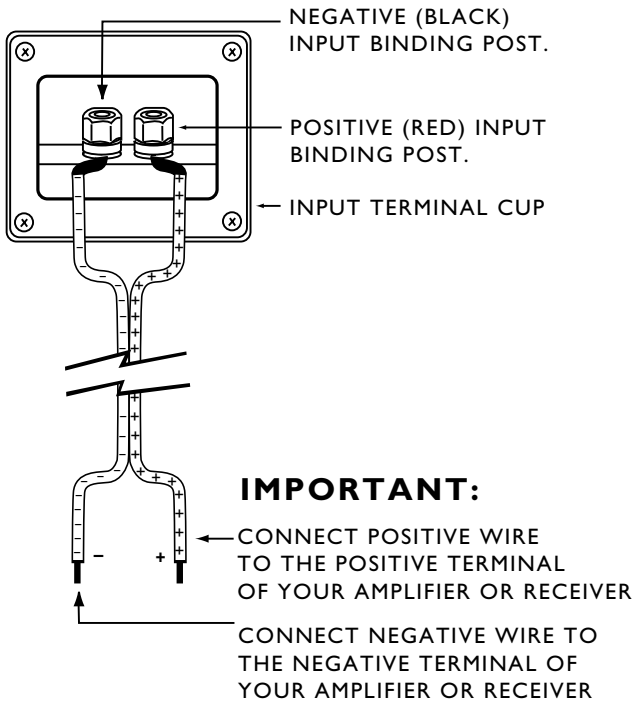


CONNECTING YOUR "TEMPEST" SPEAKERS

The following will assist you in connecting the individual speakers to your amplifier or receiver:

- (1)** First turn your amplifier or receiver off to avoid damage which may result from accidental shorting of the speaker leads.
- (2)** Correct phase polarity is critical for proper stereo imaging and bass performance. The red (+) terminal on your amplifier or receiver must be connected to the red (+) terminal on your speaker. The same applies for the black (-) terminal.
- (3)** Connect one loudspeaker at a time to ensure proper connection of left and right channels. Make sure all wires are firmly fastened.
- (4)** If you notice a great lack of bass and/or central image focus, double check your connections for proper polarity.

Diagram 2: CONNECTING YOUR SPEAKERS



FINAL ADJUSTMENTS

- (1) After checking that the speaker is in-phase and works correctly, angle the speaker for the best sound.
- (2) Hand tighten the bracket knobs only . Power tools may over-tighten the knob, and strip the threads of the insert.
- (3) Check that the entire installation is safe and secure.

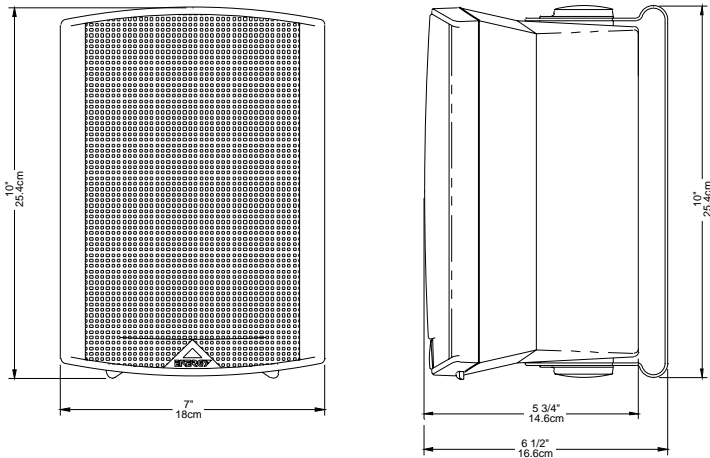
CABINET CARE

Cabinets should be gently wiped clean from time to time with a damp cloth to remove any dirt or stains. To remove dust from the grille, use the brush attachment on your vacuum cleaner or a slightly dampened sponge.

SPECIFICATIONS

RECOMMENDED AMPLIFIER POWER	5- 100watts per channel
NOMINAL IMPEDANCE	8 Ohms
FREQUENCY RESPONSE	65 Hz to 21 kHz, plus or minus 3 dB (on axis)
SENSITIVITY	89 decibels for 2.83 volts of Pink Noise, measured at 1 meter on axis.
WIRING REQUIREMENTS	Sixteen to eighteen gauge 2-conductor (unshielded or shielded) wire for runs up to eighty feet. Fourteen gauge 2-conductor (unshielded or shielded) wire for runs up to two hundred feet.
TEMPERATURE EXTREMES	-50° to 200° Fahrenheit (-45° to 93° Celsius)
DIMENSIONS -W X H X D (WITHOUT BRACKET)	7" x 10 " x 5 3/4" 18cm x 25.4cm x 14.6cm
(WITH BRACKET)	7 Wide x 10 " High x 6 1/2" Deep 18cm x 25.4cm x 16.6cm
WEIGHT (SPEAKER AND BRACKET)	6 1/2lb (2.9kg)

Diagram 3: OVERALL DIMENSIONS



LIMITED WARRANTY POLICY

Warranty Protection

Energy warrants this product to the retail purchaser against any failure resulting from original manufacturing defects in workmanship or materials. The warranty is in effect for a period of (5) years from date of purchase from an authorized **Energy** dealer and is valid only if the original dated bill of sale is presented when service is required.

The warranty does not cover damage caused during shipment, by accident, misuse, abuse, neglect, unauthorized product modification, failure to follow the instructions outlined in the owner's manual, failure to perform routine maintenance, damage resulting from unauthorized repairs or claims based upon misrepresentations of the warranty by the seller.

Warranty Service

Warranty Service: If you require service for your **Energy** loudspeaker(s) at any time during the (5) five year warranty period, please contact: 1) the dealer from whom you purchased the product(s), 2) Energy National Service, 203 Eggert Road, Buffalo, N.Y. 14215 Tel: 1-716 -896 - 9801 or 3) Energy Loudspeakers, a division of Audio Products International Corp., 3641 McNicoll Avenue, Scarborough, Ontario, Canada, M1X 1G5, Tel: 1-416-321-1800. You will be responsible for transporting the speakers in adequate packaging to protect them from damage in transit and for the shipping costs to an authorized **Energy** service center or to **Energy Loudspeakers**. If the product is returned for repair to **Energy Loudspeakers** in Scarborough or Buffalo, the costs of the return shipment to you will be paid by **Energy**, provided the repairs concerned fall within the Limited Warranty.

The **Energy** Warranty is limited to repair or replacement of **Energy** products. It does not cover any incidental or consequential damage of any kind. If the provisions in any advertisement, packing cartons or literature differ from those specified in this warranty, the terms of the Limited Warranty prevail.

Warranty Outside of the United States and Canada

Product warranties may be legislated differently from one country to another. Ask your local **Energy** dealer for details of the LIMITED WARRANTY applicable in your country.

WARNING

IMPORTANT TECHNICAL NOTE. PLEASE READ BEFORE OPERATING SPEAKERS.

THE WARRANTY ON SPEAKERS IS VOID IF THE VOICE COILS ARE BURNED, OR DAMAGED, AS RESULT OF OVERPOWERING OR CLIPPING.

OVERPOWERING:

The volume control of most amplifiers and receivers is a logarithmic type, which means that full power may be reached with the volume control at as little as the halfway point. In addition, operating the loudness feature, or boosting the treble or bass controls, increases power output well beyond rated levels.

AS A RESULT OF THE ABOVE FACTORS, A 30 WATT AMPLIFIER CAN PRODUCE OUTPUT LEVELS OF OVER 100 WATTS AND MAY DAMAGE YOUR LOUDSPEAKER.

CLIPPING:

Clipping refers to the power level at which an amplifier begins to distort a waveform by flattening its top and bottom into a square wave shape. When fed to tweeters and/or midrange speakers, this may result in exceeding their maximum power handling capacity, causing damage to the speaker voice coil.

CLIPPING CAN BE IDENTIFIED BY A FUZZY OR DISTORTED SOUND. IF THIS IS HEARD, LOWER THE VOLUME IMMEDIATELY TO AVOID DAMAGE TO YOUR SYSTEM. CONTINUOUS CLIPPING WILL DAMAGE OR BURN OUT THE SPEAKERS.